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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,923	04/25/2001	Michael G. Foulger	2018.0060001	6526

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EXAMINER
TANG, KENNETH

ART UNIT	PAPER NUMBER
2127	

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/840,923	FOULGER ET AL.
	Examiner	Art Unit	
	Kenneth Tang	2127	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>22 August 2002</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-26</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-26</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>8/22/02</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-26 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2.   Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention:

a.   In claim 1, the term "cross-platform process scheduling method" (lines 3-4) is indefinite because its description is not made explicitly clear in the claim language. For example, the "cross-platform process scheduling method" is not defined as a cross-platform but rather as processing independently with no crossover between the two different platforms. In addition, the term "cross-platform process scheduling method" is indefinite because it is not made explicitly clear whether the cross-platform process is performed directly from a first computer to a second computer or indirectly through a liason.

b.   In claims 1, 11, and 21, the term "respectively execute" is indefinite because it is not made explicitly clear in the claim language what is being respectively executed. It is vague whether this refers to executing a first process on the first computer or a cross-platform executing fashion of a first process to a second computer.

c.   In claims 2, 12, and 22, the term "master schedule" is indefinite because it is not made explicitly clear in the claim language whether the master schedule is located on the first computer, the second computer, or neither.

d.   Claim 11 recites the limitation "the scheduling computer" in line 15. There is insufficient antecedent basis for this limitation in the claim. In addition, "the scheduling computer" is indefinite because it is not made explicitly clear whether the "scheduling computer" is the same as the process scheduling computer or if a new computer is being introduced.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   **Claims 1-6, 9-16, and 19-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (US 6,275,575).**

4.   As to claim 1, Wu teaches in a system including first and second distinct computers implementing a cross-platform process scheduling method *(see Abstract)* comprising the step of:

scheduling a first process compatible with the first operating system and a second process compatible with the second operating system to respectively execute on the first and second computers *(col. 2, lines 23-64 and see Fig. 1)*.

5.   Wu illustrates in Fig. 1 that an a personal computer is connected to a coordinating server through the internet/intranet. Wu discloses that other terminal devices can exist such as cellular phones, wireless devices, IP phones, PDAs, two-way pages, etc. *(col. 1, lines 26-28 and col. 2, lines 25-26)*. Although Wu only demonstrates using a personal computer, one of ordinary skill in the art would know that more than one personal computer could be connected to the internet/intranet. The motivation for having more than one computer on the internet/intranet would be to have more terminals to communicate information with. In addition, Wu fails to explicitly state having two different operating systems between the two computers. However, one of ordinary skill in the art would know by definition that communicating between a "cross-platform" involves working with different platforms.

6.   As to claim 2, Wu teaches wherein a master schedule includes a first process identifier identifying the first process and a second process identifier identifying the second process, the first and second process identifiers being linked together to detine an executing sequence of the first and second processes, the method further comprising the step of scheduling the first and second processes to execute on the respective first and second computers according to the defined executing sequence *(col. 2, lines 43-65 and col. 3, lines 13-35)*.

7.   As to claim 3, Wu teaches wherein the master schedule includes one or more conditional inter-relationships between the first and second processes, the method further comprising the step of scheduling the first and second processes to execute based on the one or more conditional inter-relationships *(col. 3, lines 1-12)*.

8.   As to claim 4, Wu teaches wherein the one or more conditional inter-relationships include

a success criteria associated with the first process, the method further comprising the steps of:

        executing the first process, comparing the success criteria to execution results produced

by the first process *(col. 2, lines 43-67)*; and

        determining whether the first process executed successfully based on the comparison step

(col. 2, lines 53-67 and col. 3, lines 1-17).

9.   As to claim 5, Wu teaches wherein the master table includes a third process identifier

identifying a third process, the method further comprising the alternative steps of:

executing the second process when the first process executed successfully according to the

determining step, and executing the third process but not the second process when the first

process did not execute successfully according to the determining step *(col. 2, lines 53-67 and

col. 3, lines 1-26)*.

10.   As to claim 6, Wu teaches comprising the steps of:

sending a command to the first computer to initiate execution of the first process on the first

computer, receiving a result message from the first computer, the result message including the

execution results produced by the first process, and sending a command to the second computer

when the first process executed successfully according to the determining step to initiate

execution of the second process on the second computer *(col. 3, lines 1-35)*.

11.   As to claim 9, Wu teaches comprising prior to the scheduling step, the steps of:

receiving a first message from the first computer indicating that the first process needs to

be scheduled for execution on the first computer, receiving a second message from the second

computer indicating that the second process needs to be scheduled for execution on the second

computer *(col. 2, lines 43-67)*; and

generating the master schedule based on the first and second messages *(col. 2, lines 53-*

57).

12.   As to claim 10, Wu teaches wherein the generating step includes the steps of:

receiving one or more commands indicating an executing sequence of the first and

second processes *(col. 2, lines 43-67)*, and

linking the first and second processes together according to the commands *(col. 3, lines*

1-35).

13.   As to claim 11, it is rejected for the same reasons as stated in the rejection of claim 1. In

addition, Wu teaches a process scheduling computer coupled to the first and second computers,

the scheduling computer including a scheduler that schedules a first process compatible with the

first operating system and a second process compatible with the second operating system to

respectively execute on the first and second client computers *(col. 2, lines 53-64 and Fig. 1, item*

102).

14.   As to claim 12, it is rejected for the same reasons as stated in the rejection of claim 2.

15.   As to claim 13, it is rejected for the same reasons as stated in the rejection of claim 3.

16.   As to claim 14, it is rejected for the same reasons as stated in the rejection of claim 4.

17.   As to claim 15, it is rejected for the same reasons as stated in the rejection of claim 5.

18.   As to claim 16, it is rejected for the same reasons as stated in the rejection of claim 6.

19.   As to claim 19, it is rejected for the same reasons as stated in the rejection of claim 9.

20.   As to claim 20, it is rejected for the same reasons as stated in the rejection of claim 10.

21.   As to claim 21, it is rejected for the same reasons as stated in the rejection of claim 1. In addition, it is obvious that the computer system contains computer readable code because they are the instructions that drive the system.

22.   As to claim 22, it is rejected for the same reasons as stated in the rejection of claim 2.

23.   As to claim 23, it is rejected for the same reasons as stated in the rejection of claim 3.

24.   As to claim 24, it is rejected for the same reasons as stated in the rejection of claim 4.

25.   As to claim 25, it is rejected for the same reasons as stated in the rejection of claim 5.

26.   As to claim 26, it is rejected for the same reasons as stated in the rejection of claim 6.

27.   **Claims 7-8 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (US 6,275,575) in view of Bowman-Amuah (US 6,606,660 B1).**

28.   As to claim 7, Wu fails to explicitly teach the step of monitoring processor loading associated with the first and second computers and adjusting the executing sequence based on the processor loading. However, Bowman-Amuah teaches monitoring to provide load balancing over a network *(col. 92, lines 49-67)*. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of monitoring processor loading associated with the first and second computers and adjusting the executing sequence based on the processor loading to the existing system of Wu because it will help conserve resources, and therefore, increase throughput of the system *(col. 92, lines 65-67 through col. 93, lines 1-4)*.

29.   As to claim 8, Wu teaches a master table with associated process identifier but fails to explicitly teach wherein the master table includes a priority associated with each process identifier. However, Bowman-Amuah teaches thread processing based on priority which can be controlled and altered by an administrator *(col. 94, lines 25-30)*. It would have been obvious to

one of ordinary skill in the art at the time the invention was made to include the feature of

priority scheduling because scheduling efficiency would increase by being able to schedule

according to the most important first.

30.   As to claim 17, it is rejected for the same reasons as stated in the rejection of claim 7.

31.   As to claim 18, it is rejected for the same reasons as stated in the rejection of claim 8.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kenneth Tang whose telephone number is (703) 305-5334. The

examiner can normally be reached on 8:30AM - 7:00PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on (703) 305-9678. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt
6/13/04

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